

SHARP AR-M450U
AR-M450N

Digital Laser Printer/Copiers

SHARP



EXTREME SPEED AND PERFORMANCE

Part of the most security conscious Multifunctional Product range on the UK Market



SHARP DOCUMENT SOLUTIONS



MODULAR
SYSTEM



digital

AR-M450U/AR-M450N DIGITAL LASER PRINTER/COPIERS

The Outstanding Digital Copiers that Grow to Meet Your Needs

Combining superior productivity with exceptional image quality, the AR-M450U and AR-M450N printer/copiers are here to streamline your busy office. With its impressive range of fully modular options, the AR-M450 is ready to meet all your office needs – both present and future. Select the modules you need, and enjoy the flexibility of customising the document imaging system best suited to your office. Whether you want to copy, print, scan, or fax, the ultra-efficient AR-M450 will do the job smarter and faster. Smooth workflow and top-quality documents – just what your office needs.

AR-M450U

Basic Model

Creates high-quality documents for your office.



- Copy
- Print
- D-SPF

AR-M450U/N

Duplex Models

Reduces paper waste and increases convenience.



- Copy
- Print
- D-SPF
- Duplex
- Fax

AR-M450U/N

Duplex/Finisher Models

Automates burdensome chores for you.



- Copy
- Print
- D-SPF
- Duplex
- Fax
- Finisher

AR-M450U/N

Duplex/Network Models

Centralises document creation in the networked office.



- Copy
- Network Print
- Fax
- D-SPF
- Sharpdesk
- Mail Bin
- Network Scan
- Duplex

AR-M450U/N

Full-Function Models

Covers all your document needs in the networked office.



- Copy
- Network Print
- Fax
- D-SPF
- Sharpdesk
- Mail Bin
- Network Scan
- Duplex
- Saddle Stitch

DOCUMENT QUALITY & PRODUCTION

THE AR-M450U & AR-M450N DIGITAL LASER PRINTER/COPIERS

COPY

AUTOMATIC FEATURES REDUCE WORK

With its wide selection of helpful options, the AR-M450 is a document-creating powerhouse. The Duplex Single Pass Feeder (DSPF) enhances productivity by allowing you to make documents quickly and efficiently. Handy finishing options automate the process from copying to finishing, saving you valuable time. The AR-M450 must be configured with either additional 1 x 500, 3 x 500 or 1 x 500/1 x 2,000.

Functional Copying

A3 Duplex Scanning for Duplex Copying

Easily make duplex copies from double-sided documents with the Duplex Single Pass Feeder (DSPF), which enables document scanning up to A3 size. The AR-M450 saves time by requiring only a single scan for double-sided documents. By doing away with the reversing circuit, the AR-M450 prevents damage to documents.

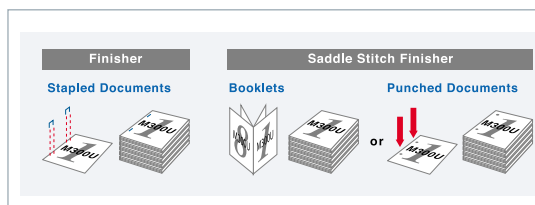
Document Finishing

Sort and staple documents automatically with the time-saving Finisher and Saddle Stitch Finisher options.

After arranging the page order of scanned documents in its memory, the AR-M450, in tandem with the optional Finisher, can staple up to 30 A4 pages.

The Saddle Stitch Finisher option, meanwhile, can staple up to 50 A4 pages and fold documents to make booklets. With the optional Punch Module, it's possible to punch holes in documents.

Both finishing options also automatically sort and separate copy runs for your convenience.



Electronic Sorting

The Electronic Sorting Function allows multiple sets of copied documents to be made quickly and efficiently. A single scan stores up to 50 A4 pages of a given document in the memory, allowing you to return to work on the original. The AR-M450 then uses the stored version to produce multiple sets of copies in the original order. Avoid the hassle of sorting and arranging pages after copying them with the intelligent AR-M450.

Productive Copying

High-Speed Copying

The AR-M450U and AR-M450N have a continuous copy rate of 45 cpm, allowing them to quickly produce even large volumes of documents. High-speed copying to improve the workflow in your networked office.



Large Paper Capacity, Wide Paper Range

Meet your high-volume copying needs with one of two paper drawer options available, providing a paper capacity of up to 3,100 sheets. Depending on your printing needs, the drawers can accommodate a wide range of paper sizes and types, including OHP transparencies and heavy stock*.

**Up to 205g/m² via the 1st tray of AR-D14N/AR-D13N or AR-MU1*



MAX.
3100

LCD Touch Panel with Animated Guide

The large touch-sensitive LCD panel makes operating the AR-M450 a breeze. The LCD panel displays the current job status, along with other operational information, to give you a clear overview of your work. Whether copying, printing, scanning or faxing, you'll enjoy a seamless, efficient workflow.



Various Copying Functions

The AR-M450 makes copying more convenient with its wide range of built-in functions.

- Automatic Paper Selection (APS)
- Automatic Magnification Selection (AMS)
- Auto Tray Switching
- Audit Function up to 100 accounts
- Scan-to-Memory while Printing
- Dual Page Copy
- Job Programme
- Rotation Copy
- Multishot (2 in 1, 4 in 1)
- Edge and Centre Erase
- Margin Shift

PRINT

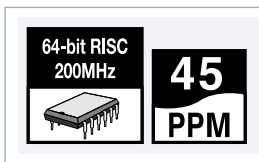
THE HIGH PERFORMANCE PRINTER FOR TODAY'S OFFICES

Whether it's multiple short-run jobs or voluminous print jobs, the intelligent AR-M450U and AR-M450N deliver printing of the highest standard. By installing options, you can enjoy the expanded functionality of TCP/IP-based network printing (standard on AR-M450N). The AR-M450's convenient features ensure smooth, uninterrupted operation, while its modular options enhance productivity. Finally, the printing solution you've been looking for.

High Performance Printing

High-Speed Printing & Data Processing

The AR-M450 boasts a continuous print rate of 45 ppm, ensuring speedy and efficient printing. The secret of high-speed printing on the AR-M450 is its 64-bit RISC 200MHz processor, which allows even memory-intensive graphics documents to be processed promptly.



600dpi Crisp and Clear Documents

The AR-M450's laser printer engine produces razor-sharp images and crisp, legible text at 600dpi resolution. Employing digital smoothing technology further enhances the resolution to the equivalent of 1200dpi. The AR-M450 comes complete with Photo Mode for detailed, fine-grained reproductions of photographs and halftone images. Superb quality print jobs that make your work look even better.

Compatible with HP™ PCL®6 and PostScript®3*1

Not only is the AR-M450 compatible with HP™ PCL®6, but, with the optional PS3 Expansion Kit, it can also handle the latest PDL, PostScript®3. The AR-M450 effortlessly manages even the most sophisticated documents.

Duplex Printing*1

Efficient and economical document creation is yours with the AR-M450. Doing away with bulky files, duplex printing halves filing space and paper costs.

Convenient Print Functions

Priority Printing*1

In the Job Status Mode, the operation panel displays a list of all jobs, whether copying, printing, scanning or faxing. See at a glance which job is in progress and where your job is in the queue. You can also change the print queue order with one touch of the LCD screen. Urgent jobs can receive priority, meaning you don't have to wait until other jobs are finished.

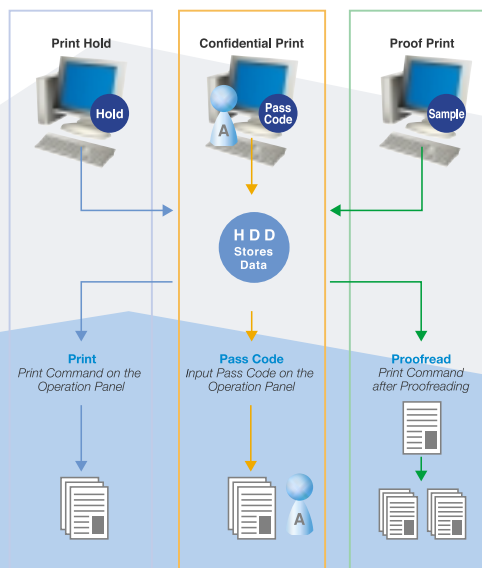


*1 Options required

Job Control Function*1

The AR-M450 can hold your printing job in the optional hard disk drive, giving you a host of printing conveniences.

- **Print Hold:** With the Job Control Function, store your print job in the optional hard disk drive. When you want the documents, go to the AR-M450 and print them directly from its memory.
- **Confidential Print:** The Job Control Function also has a pass code setting to keep your sensitive documents away from prying eyes. Before printing the secure documents the AR-M450 will require verification.
- **Proof Print:** The AR-M450 allows you to check your work before printing it. Print a sample copy of the document, proofread it, and avoid problems of misprinting when doing large print runs.

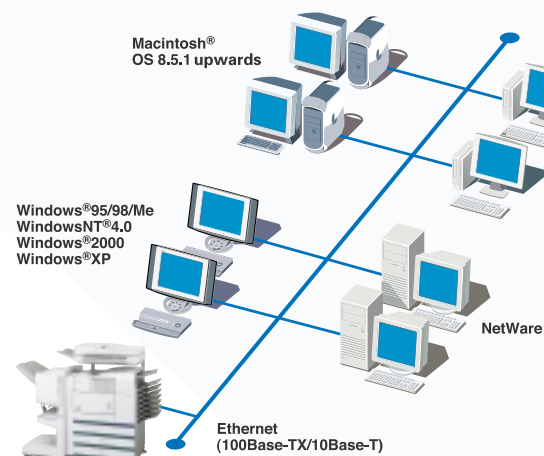


Powerful Networking

Smooth, Seamless Network Printing

(Optional on AR-M450U, standard on AR-M450N)

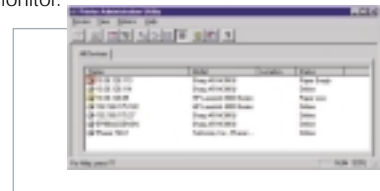
With the Printer Expansion Kit and Print Server Card, the AR-M450 can support both 100Base-TX and 10Base-T networks. Heavy network traffic is no problem for the AR-M450 – get used to a smooth flow of documents in your networked office. The AR-M450 also handles mixed-OS environments with ease. (With optional PostScript®3)



It supports any combination of Windows®95/98/Me, WindowsNT®4.0, Windows®2000, Windows®XP and Macintosh® OS 8.5.1 upwards. No more cross-platform hassles.

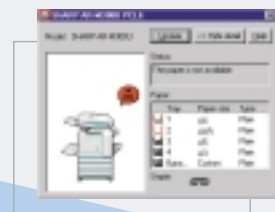
Printer Administration Utility

This handy utility software allows network administrators to check the printing status or change the IP address directly from the print server's monitor.



Stay Informed on Printer Status

The Printer Status Monitor keeps you informed on the AR-M450's operating conditions. Find out immediately the available paper type, size and quantity and know whether the AR-M450 is ready for your print job.



Other Functions

- Binding Edge Function
- Transparency Inserts
- Overlay Function
- Paper Source & Output Tray Selection
- Toner Save Mode
- Auto Power Shut-Off Mode
- Key Operator Programme
- Process Cartridge for easy maintenance
- Toner Recycling System for reduced running cost
- Watermark
- Fit to page
- N-up (2/4/6/8)

NETWORK SCAN OPTION

ENHANCE PRODUCTIVITY WITH POWERFUL SCANNING

With the optional Network Scanner Expansion Kit and Print Server Card installed, the AR-M450U/AR-M450N clears up excess paper copies and enhances workflow in the networked office. A speedy one-pass scanner converts your documents into digital files. Network users can then access those files using Sharpdesk™, a software package which smoothly handles all shared digital files. Streamline your business workflow and watch your document troubles evaporate.

Scan to Desktop/E-Mail/FTP

To Desktop

With the optional Sharpdesk™ software package, the AR-M450 sends scanned documents directly to your PC without routing through a server.

To E-Mail

Use the AR-M450 to send scanned documents as e-mail attachments. Unlike fax transmission, this time-saver lets you send a document directly to the intended recipient while maintaining the original image quality.

To FTP Server

The AR-M450 also enables scanned documents to be stored on a file server. This electronic filing system makes it easy for all network users to share information without resorting to excessive paper clutter.

Sharpdesk™

Sharpdesk™ takes knowledge sharing to a higher level. With its simple drag-and-drop operation it lets you handle over 200 different file types, streamlining the process of document creation. Bring seamless document management to your networked office with Sharpdesk™.

User-Friendly Operation

File Storage: The folder window for Sharpdesk™ displays stored files in a neatly organised directory, clearly guiding you to the document or image you want.

Thumbnail: Sharpdesk™ can display thumbnail icons for over 200 types of file, including TIFF, JPEG and BMP, giving you the convenience of browsing through your documents without having to open them.

Powerful Search: Whether you use a single word, a phrase, or a list of words as your search key, Sharpdesk™ helps you quickly find the file you need. Not only does it retrieve regular text files, it also retrieves image files that have been converted by OCR into editable text files.

Output: With simple drag-and-drop operation, Sharpdesk™ enables printing of documents directly from your desktop. It also allows documents to be sent as e-mail attachments or converted to text files using built-in OCR.

Sharpdesk™ Composer: Sharpdesk™ Composer enables you to drag-and-drop files from different types of applications and combine them into a single, print-ready document. You can also change the page order just as easily.

FAXING HAS NEVER BEEN EASIER

FOR THE ULTIMATE DOCUMENT ALL- ROUNDER, TOP THE AR-M450 OFF WITH FAX FUNCTIONALITY.

Installing the optional Fax Expansion Kit enhances efficiency in your office by enabling high-speed Super G3 fax transmission. The versatile AR-M450 also supports the ITU-T-F-Code standard, and offers you a host of convenient functions. Enjoy smooth fax operation, thanks to such easy-to-use functions as duplex document faxing and one-touch dialling.

DATA SECURITY KIT

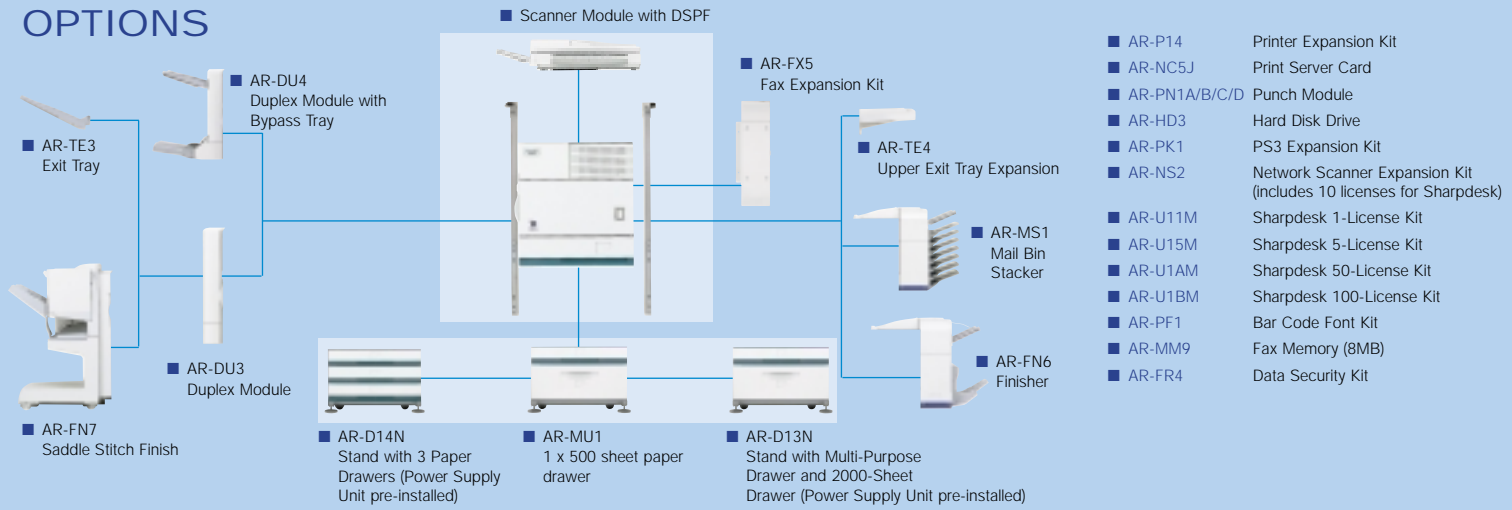
THE COMMON CRITERIA ACCREDITED SHARP DATA SECURITY KIT ENABLES SECURE COPYING, PRINTING AND SCANNING.

Digital copier/printers typically use computer style hard disks to capture the documents to be printed, scanned or reproduced. The disks can retain hundreds of pages of confidential information from previous copy, print and scan jobs. The Sharp Data Security Kit overwrites the document with random data rendering it unrecoverable by commercial means. This essential utility, recommended for all who handle sensitive information, is the World's first Common Criteria validated copier/printer solution. Highly sensitive information can now be securely printed, scanned or copied without the worry of residual data being left on the multifunctional device. The Common Criteria accredited Sharp Data Security Kit, will insure that no information remains on the destination device after use. Further security can be obtained by using the secure document release solution available from Sharp, which will only allow the print to be recovered when the user is present. Data protection is always important when dealing with customer or sensitive records. The Sharp Data Security Kit gives this protection by removing any data that may remain on the multifunctional device ensuring data security.

Features

- Overwrite of hard disk data after copy, scan and print use.
- Runs automatically without user intervention.
- Common Criteria accredited to EAL2 level ISO 15408.

OPTIONS



- AR-P14 Printer Expansion Kit
- AR-NC5J Print Server Card
- AR-PN1A/B/C/D Punch Module
- AR-HD3 Hard Disk Drive
- AR-PK1 PS3 Expansion Kit
- AR-NS2 Network Scanner Expansion Kit (includes 10 licenses for Sharpdesk)
- AR-U11M Sharpdesk 1-License Kit
- AR-U15M Sharpdesk 5-License Kit
- AR-U1AM Sharpdesk 50-License Kit
- AR-U1BM Sharpdesk 100-License Kit
- AR-PF1 Bar Code Font Kit
- AR-MM9 Fax Memory (8MB)
- AR-FR4 Data Security Kit

AR-M450U/AR-M450N SPECIFICATIONS

GENERAL

Originals	Max. A3, Min. A5 (sheets, bound documents)
Paper Size	A4, B5 Up to A3 with optional AR-D14N, AR-D13N or AR-MU1
Paper Capacity	500 sheets, expandable up to 3,100 sheets with options
Copy/Print Speed*1	Max. 45 cpm/ppm
Memory	64 MB (upgradable to 320 MB), Hard disk (option)
Warm-Up Time*2	Approx. 80 seconds
First Copy Time*2	5.3 seconds (1st paper tray, Quick Scan mode, 600 x 300 dpi)
Power Requirements	Rated local AC voltage \pm 10%, 50/60 Hz
Power Consumption	Max. 1.44 kW (100 - 127 V), 1.85 kW (200 - 240 V)
Dimensions (W x D x H)*3	826 x 685 x 1,116 mm
Weight*3	Approx. 99 kg

COPIER

Continuous Copy	Max. 999 copies
Resolution	600 dpi (copying)/300, 600 dpi (scanning)
Zoom Range	25 to 400% with 8 preset ratios (4 reduction + 4 enlargement)

PRINTER

Resolution	600 dpi, 1200 dpi equivalent with smoothing technology
Parallel Interface	IEEE 1284 parallel port
Supported OS (Printer Drivers)	Windows® 95/98/Me, Windows NT® 4.0, Windows® 2000, Windows® XP, Macintosh® OS 8.5.1 upwards
PDL Emulation	PCL®5e, PCL®6, PostScript®3*5
Resident Fonts	PCL: 45 outline fonts, PS: 136 outline fonts (option)

NETWORK PRINTER

(Optional AR-P14 and AR-NC5J required on AR-M450U, standard on AR-M450N)	
Hardware Interface	100Base-TX, 10Base-T
Supported Platforms	UNIX, Windows® 95/98/Me, Windows NT® 4.0, Windows® 2000, Windows® XP, Novell NetWare 3.x/4.x (IntranetWare)/NetWare5, Macintosh® OS 8.5.1 upwards
Network Protocols	IPX/SPX for Novell environment, TCP/IP for Windows® and UNIX environment, EtherTalk for Macintosh® environment
Printing Protocols	Novell Printserver Application with NCS and Bindery, Printer resident LPD (includes reaction to LPO request), TCP FTP for downloading print files, EtherTalk Printing, IPP, NetBEUI for Windows®

SCANNER

Type AR-EF2 (DSPF)	Simultaneous duplex scanning system
Document Feeding	Max. 50 sheets*6

NETWORK SCANNER

(Optional AR-NS2 and AR-NC5J required on AR-M450U, optional AR-NS2 only required on AR-M450N)	
Resolution	200, 300, 400, 600 dpi
Compatibility	TWAIN compliant (push out method)
Sharpdesk™ Licenses	10-user licenses included

FAX (Optional AR-FX5 required)

Transmission Time	Less than 3 seconds*7
Compression Method	MH/MR/MMR/JBIG
Modem Speed	33,600 bps to 2,400 bps with automatic fallback
Communication Formula	Super G3, G3
Number of Supported Lines	1 for PSTN or PBX
Grayscale Levels	256 levels
Resolution Settings	Normal/Small Letter/Fine/Ultra-Fine
Memory	2 MB, upgradable to 10 MB (option)

OPTIONS

AR-DU3 DUPLEX MODULE

Paper Size for Duplex Copy	Max. A3, Min. A5R
Tray Capacity (Exit Tray*8)	100 sheets*6

AR-DU4 DUPLEX MODULE WITH BYPASS TRAY

Duplex Module	Paper Size	Max. A3, Min. A5R
	Tray Capacity (Exit Tray)	100 sheets*6
Bypass Tray	Paper Size	Max. A3, Min. A5R
	Paper Capacity	100 sheets*6

AR-MS1 MAIL BIN STACKER

Number of Trays	8 (Top tray and 7 Mail bins)
Tray Capacity	Top tray: 250 sheets*6 Mail bins: 100 sheets each*6
Paper Size	Top tray: Max. A3, Min. A5R and envelope*10 Mail bins: Max. A3, Min. B5R

AR-FN6 FINISHER

Number of Trays	2 (Upper: Normal tray, Lower: Offset tray)
Tray Capacity	Normal tray: 500 sheets*6, Offset tray: 750 sheets*6
Paper Size	Normal tray: Max. A3, Min. A5R Offset tray: Max. A4, Min. B5
Paper Size and Capacity for Stapling	A4, B5, up to 30 sheets (80 g/m ²)
Staple Pattern	3 patterns (front, rear or both)

AR-FN7 SADDLE STITCH FINISHER

Number of Trays	2 (Upper: Offset tray, Lower: Saddle stitch tray)
Offset Tray Capacity	Max. 1,000 sheets [A4 or smaller]
Saddle Stitch Tray Capacity	Max. 100 sheets
Paper Size	Max. A3, Min. A5R
Paper Size for Stapling	A3 to B5
Stapling Capacity	Max. 50 sheets [A4 or smaller]*10
Staple Pattern	3 patterns (front, rear or both)

AR-PN1A/B/C/D PUNCH MODULE

Model	AR-PN1A	AR-PN1C	AR-PN1D
Number of Holes	2	4	4

AR-MU1 MULTI-PURPOSE DRAWER (Requires optional cabinet)

Paper Size	A3 to A5R and envelope*9
Paper Capacity	500 sheets*6, 40 envelopes*9

AR-D13N STAND WITH MULTI-PURPOSE DRAWER AND 2000-SHEET DRAWER

Upper Drawer	Paper Size	A3 to A5R and envelope*9
	Paper Capacity	500 sheets*7, 40 envelopes*9
Lower Drawer	Paper Size	A4
	Paper Capacity	2,000 sheets

AR-D14N STAND WITH 3 PAPER DRAWERS

Upper Drawer	Paper Size	A3 to A5R and envelope*9
	Paper Capacity	500 sheets*6, 40 envelopes*9
Middle/Lower Drawer	Paper Size	A3 to B5R
	Paper Capacity	500 sheets each

*1 A4, Portrait.

*2 At rated voltage, 20°C (68°F), 65% RH.

*3 Dimensions and weight include scanner rack and stand.

*4 Standard configuration AR-M450U allows printing via parallel port only.

*5 PostScript®3 is available as an option on AR-M450U and AR-M450N.

*6 A4, 80 g/m².

*7 Based on ITU-T test chart No.1 standard resolution. Data transmission time only, not including protocol transmission time.

*8 Optional AR-TE3.

*9 COM-10, Monarch, DL, C5, ISO B5.

*10 128 g/m² x 2 + 80 g/m² x 48.

* Design and specifications are current as of April 2003, but are subject to change without prior notice.

* Some brand names and product names are trademarks and registered trademarks, thus are the property of their respective owners.

SHARP

Sharp Electronics (UK) Limited,
Sherbourne House, Croxley Business Park,
Watford, Hertfordshire WD18 8WT
Telephone: 0800 915 4045
Website: www.sharpinbusiness.co.uk